

## REMARKS/ARGUMENTS

Reconsideration and allowance of the above-referenced patent application are respectfully requested.

*Amendments:*

Claim 17 has been amended. No new matter has been added. Upon entry of this amendment, claims 1-28 will remain in the application.

*Response to Objections/Rejections:*

In the Official Action, claim 17 was objected to because “associated” was misspelled on line 4. Claim 17 has been amended to correct this error. Withdrawal of the objection to claim 17 is requested.

Claims 1-6, 14-20, and 28 stand rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Driscoll et al. (U.S. 5,987,302). This rejection is respectfully traversed for the reasons given below.

As noted in the background portion of the present application, conventional prior art constructed response (CR) scoring systems, such as the Driscoll et al. system cited by the Examiner, implicitly treat the CR as the fundamental unit of work, the “thing-to-be-scored.” Driscoll et al. make no distinction between the kind of CR something is and the way that particular unit of work should be treated. Further, no distinction is made between the CR as test-taker-contributed content and the CR as the carrier of state or status information. Instead, the status of a particular piece of test-taker-contributed material is inferred by the system from other information. By contrast, the system of the invention can distinguish between the CR as test-taker-contributed content and the CR as the carrier of state or status information.

Despite this significant difference, the Examiner has analogized the claimed invention to the system disclosed in the Driscoll et al. patent by alleging that Driscoll et al. disclose an assessment program that relates received CRs to cases for assessment as an object, as well as cases having different states, such as priority of date and time due, corresponding to the status of the cases in the assessment process, the cases being linked to a test taker who created the CR and linked to scoring guidelines for discrete scorable classifications of the cases, where the discrete scorable classifications are based on “at least one of the time of submission of the

essay response and the date an evaluation of the essay response is due to the examinee, by topic.” Applicants submit that the Examiner has misunderstood the claimed invention and/or the teachings of Driscoll et al. Applicant will attempt to clarify below.

The claimed Consolidated Online Assessment System (COLA System) creates, manipulates, and distributes an object-oriented paradigm that represents the scoring and related activities as a unified and integrated family of loosely coupled objects. The invention introduces the concept of a “case” as such an object, where the case represents a state-machine that replaces the CR as the unit of work for scoring. The case includes the scoring model and associated properties that encapsulate the business rules associated with what actions are appropriate or required for a unit of work, the responses to the unit of work that represent the CR (e.g., essays or other text-based responses, audio responses, digitized video responses, scanned images, diagrams, lessons plans, etc., and ties that content to its creator), and a distinct scorable unit (DSU) that represents a tree-based mechanism that connects and provides inheritability for the other primary system objects or “cases.” By so defining a “case,” the invention distinguishes between the thing-to-be-scored as a unit of work and the content of the thing, between the unit of work and the rules for determining the disposition of that piece of work, and between the status or state of a piece of work and the content (or scores) associated with that work. As a result of distinguishing these elements in the manner of the present invention, it simply does not matter any longer what the particular content of a particular piece of work is to the rest of the system. For example, the design of the present invention makes it unnecessary to specify that \*this\* content received \*this\* score. Instead, what matters is that a particular Case is in a “SCORED” state in the assessment process, that it represents “this” content, associated with “this” DSU, which in turn indicates that it was scored using “these” rules.

Applicant notes that this concept of a “case” is clearly set forth in the claims. For example, independent claim 1 recites an assessment program that assesses a case including CRs, status, test taker identity, scoring model and DSU. Similar limitations may be found in independent claim 15. In particular, the assessment program of claim 1:

relates received constructed responses to cases for assessment as an object,  
said cases having different states corresponding to the status of the case in the

assessment process, said cases further being linked to the identity of the test taker who created a received constructed response, and a scoring model for discrete scorable classifications of said cases.

By contrast, as in prior art CR scoring systems mentioned in the background portion of the present application, the Driscoll et al. system implements a database comprising a table 193 (Figure 4) in which is stored information regarding essays submitted for scoring. Data related to the question and exam for which a particular question is to be used is stored in tables 194 and 195. Information about the students who submit the essays and the readers who evaluate the essays are stored in table 196. The rubrics and overall evaluation scores are stored in tables 197 and 198 (column 8, lines 34-46). Accordingly, the CR data is stored in a standard relational database structure including the CR entity and its attributes. Though Driscoll et al. suggest the use of an object oriented database (column 8, lines 35-36), Driscoll et al. nowhere suggest the concept of a "case" as such an "object" for assessment. Instead, the implication of the teaching of Driscoll et al. is that, if anything, the CR itself would be the "object" for assessment.

Driscoll et al. do not disclose the claimed concept of a "case" including the CRs, status, test taker identity, scoring model and DSU as claimed. Driscoll et al. also do not disclose the use of such state information and associated parameters in the assessment process but instead use an administration module that controls when the assessment is to be completed. More specifically, the kinds of information referenced as indicating anticipation of the invention by Driscoll et. al., like priority of date and time due, are not in fact states at all but, at best, are attributes of a CR. A case has states like "READY TO BE SCORED" or "COMPLETED", but to say that a CR has the state "January 14, 1999 at 4:03pm" makes no sense. Applicant submits that such information cannot reasonably be interpreted to constitute a "state" of a "case" as defined in the present application. Unlike the claimed invention where the CR is an attribute of the "case" being scored, the Driscoll et al. system scores the CR as the "thing" to be scored. Thus, while the invention uses the case object to maintain state information (e.g., ready to score), to connect business rules (e.g., scoring models) and organizing principles (e.g., DSUs) to CRs, and to connect test-taker data to CRs, Driscoll et al. use the conventional approach of relationally linking auxiliary data (non-state, non-

business-rule, non-organizational information) directly to the CR. Moreover, the scoring model used in the Driscoll et al. system is not “associated” or dynamically linked with a “case” object as claimed but is instead a hard-coded set of business rules instantiated in software that control workflow through the evaluation of CR attributes.

It is unclear to applicant what the Examiner considers to be equivalent to the claimed “case” as distinct from a “constructed response.” The Examiner alleges that Driscoll et al. discloses “a computer including an assessment program that relates received constructed responses to cases for assessment as an object” but does not indicate what Driscoll et al. disclose to be the claimed “case.” As noted above, no such “case” is taught by Driscoll et al. Accordingly, Driscoll et al. do not teach the concept of different case “states,” scoring models, and the like, for assessment by an assessment program as the Examiner alleges.

For these reasons, the rejection of claims 1-6, 14-20 and 28 as being anticipated by Driscoll et al. is believed to be in error and withdrawal of this rejection is respectfully requested.

*Allowable Subject Matter*

Applicant appreciates the Examiner’s indication that claims 7-13 and 21-27 contain allowable subject matter and would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. As noted above, independent claims 1 and 15 from which claims 7-13 and 21-27 depend are believed to be allowable; therefore, claims 7-13 and 21-27 are believed to be allowable in their present form. Applicant reserves the right to place these claims in independent form at a later time, as necessary, to obtain allowance.

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**PATENT**

**CONCLUSION**

The present application is in condition for allowance and a Notice of Allowability is respectfully requested. The Examiner is encouraged to contact the undersigned attorney if the present application is not believed to be in condition for allowance for any reason.

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Michael P. Dunnam  
Registration No. 32,611

Woodcock Washburn LLP  
One Liberty Place - 46th Floor  
Philadelphia PA 19103  
Telephone: (215) 568-3100  
Facsimile: (215) 568-3439